



### The role of Social Media in Science

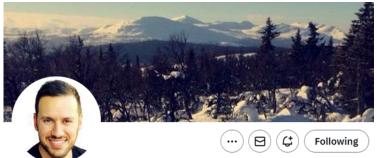
Dr. Solmar Varela (@solmarvarela)

Chair of Materials Science and Nanotechnology, Institute of Materials Science, Faculty of Mechanical Science and Engineering, Technische Universität Dresden

### Social media?

There are four ways to get your research known, but only one of these is an option for every early career researcher:

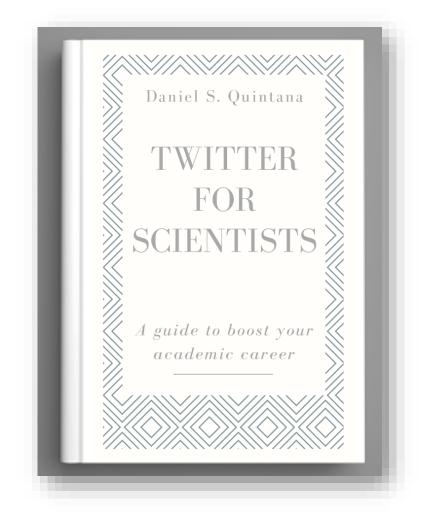
- 1. Already be famous
- 2. Have a famous mentor
- 3. Repeatedly win the peer-review lottery
- 4. Actively contribute to social media
- Dan Quintana (@dsquintana) March 12, 2019



Dan Quintana @dsquintana

Associate Professor of Psychology <u>@UniOslo</u> | Behavioral neuroendocrinology, psychophysiology & meta-science | <u>@hertzpodcast</u> producer/co-host

924 Following 22.5K Followers







#### Visual worlds and online gaming

**Fortnite** 

**Social networking sites** 



Media Sharing networks



#### **Blogs and blogging Platforms**

**WordPress** 

Microblogging services

X (ex-twitter)

"Online platforms and websites that allow users to create, share, and exchange content and information with a wide audience"

### What is a social media?

Oxford Languages

#### **Content-sharing communities**

**Pinterest** 



Linkedin, Google Scholar, and Reseachgate

**Video sharing sites** 

Youtube, TikTok

**Review and rating sites** 

**Tripadvisor** 

**Discussion forums and** message boards

Reddit







### **OVERVIEW OF SOCIAL MEDIA USE**

HEADLINES FOR SOCIAL MEDIA ADOPTION AND USE (NOTE: USER IDENTITIES MAY NOT REPRESENT UNIQUE INDIVIDUALS)



NUMBER OF SOCIAL MEDIA USER IDENTITIES

QUARTER-ON-QUARTER CHANGE IN SOCIAL MEDIA USER IDENTITIES

YEAR-ON-YEAR CHANGE IN SOCIAL MEDIA USER IDENTITIES

AVERAGE DAILY TIME SPENT USING SOCIAL MEDIA

AVERAGE NUMBER OF SOCIAL PLATFORMS USED EACH MONTH



KEPIOS



we are social



**(O)** Meltwater



GWI.

we

are social

**4.95** BILLION

+1.6% +76 MILLION +4.5% +215 MILLION 2H 24M

YOY: -2.5% (-4 MINS)

**6.7** YOY: -6.9% (-0.5)

SOCIAL MEDIA USER IDENTITIES vs. TOTAL POPULATION



61.4%

SOCIAL MEDIA USER IDENTITIES AGED 18+ vs. POPULATION AGED 18+



80.8%





93.5%





46.4%

MALE SOCIAL MEDIA USER IDENTITIES vs. TOTAL SOCIAL MEDIA USER IDENTITIES



53.6%

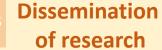
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### Why use Social Media in Science?

For institutes and research organizations, can enhance their public image, attact funding, promote the impact of their work



**Science Outreach** 



Scientists can use social media to share research papers, conference presentations, increasing the visibility and impact





### **Networking and**

Enable scientists to connect with colleagues and

researches from

around the world.

This networking can

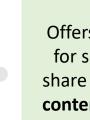
lead to

collaborations, the

exchange of ideas,

and the sharing of

research resources



Can provide scientists with fresh perspectives, new ideas and inspiration for their research.

Innovation



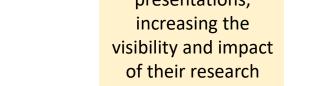
**Feedback** and peer review

Receive feedback and engage in informal peer review





Offers a platform for scientists to share **educational** content, including videos, infographics, and articles







. . . .

**Science** 

communication

Communicate their

research findings to a

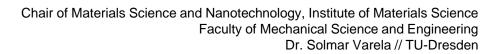
broader audience,

including the general

public. Scientific

community - public





### An example of successful use...



#### **Advantages**

You can participate

whether you work at

home or in the

laboratory.

Being a virtual event,

you do not need to

travel, the costs

decrease

substantially, without

demerit to the quality

of the work or to the

scientific discussion

they will generate.

Additionally, its

environmental

footprint is lower: it does not pollute

Posters can be presented in Spanish, Portuguese, or English. Tweet your poster. Include the title, abstract, your category hashtag and the main event hashtag

 Discuss and share your work on any social media. Make sure to respond to questions from the community and juries.

(#LatinXChem23)

 Choose any dimension or format for your poster: the important point is that the text and figures are legible.

What is #LatinXChem?

virtual forum through which the community of Latin American chemists the world can share and discuss their advances.

@LatinXChem is a located anywhere in research results and

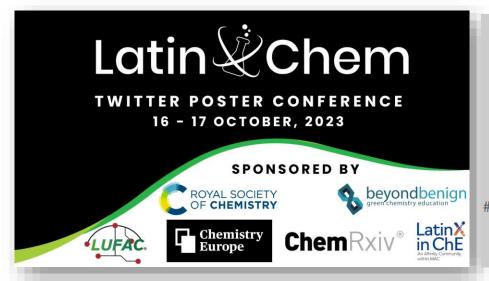


More than 1200 posters from 43 countries were received in its first version, with 20 million impacts on Twitter





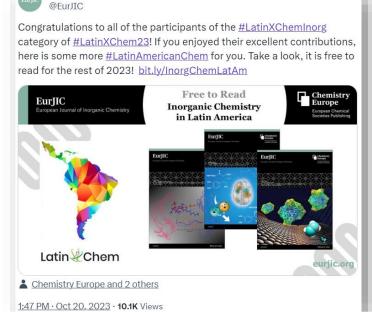
### An example of successful use...



#LatinXChemAna
#LatinXChemBio
#LatinXChemComp
#LatinXChemEdu
#LatinXChemEng
#LatinXChemEnv
#LatinXChemInorg
#LatinXChemNanoMat
#LatinXChemOrg
#LatinXChemPhys

"For each category, the best works will be selected for an award. Our sponsors will deliver prizes (book vouchers) for 100-200 USD. The best poster overall for the event will be awarded a special prize (150 USD) and one prize for the most popular work (150 USD)".

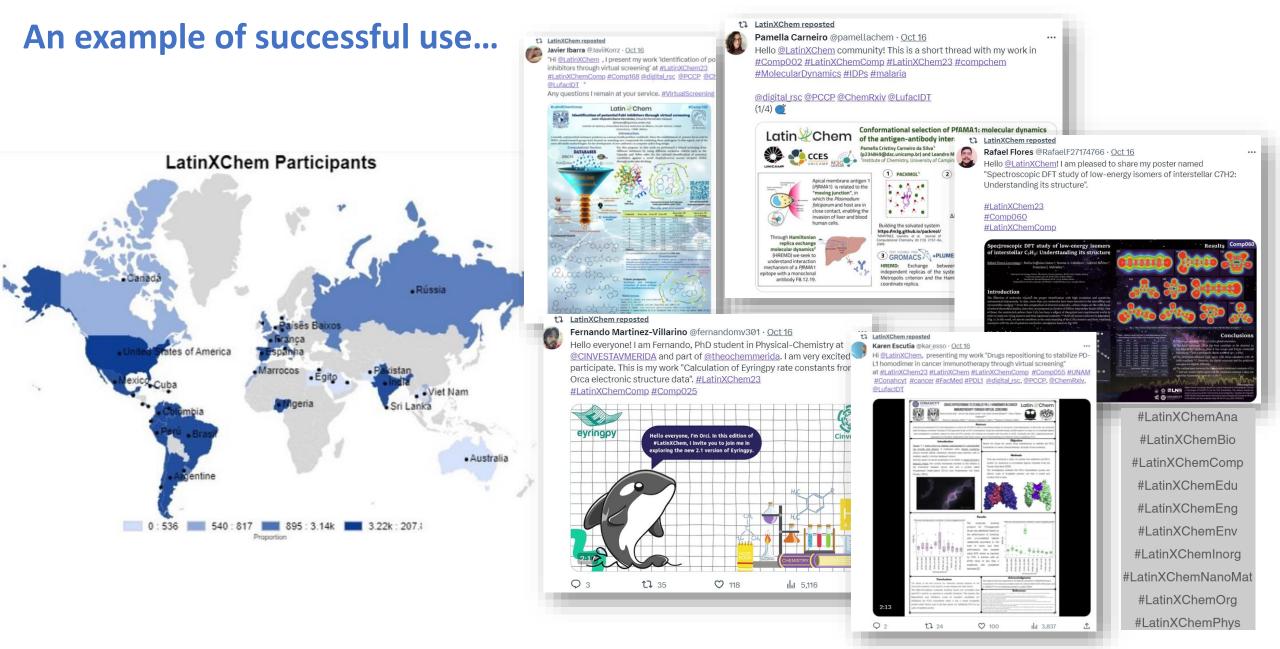
**EurJIC** 



The European Journal of Inorganic Chemistry





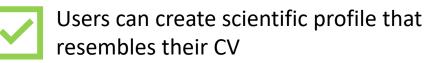


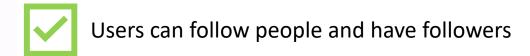


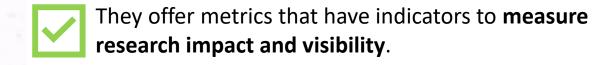


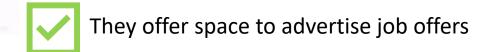
### Social media for researchers















### Social media most used by researchers







**Academic Social Media** 







**Job Opportunities** 





### Social media most used by researchers



# SCIENTISTS AND THE

Giant academic social networks have taken off to a degree that no one expected even a few years ago.

A Nature survey explores why.

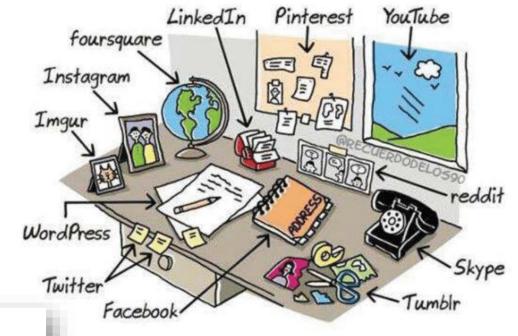
SOCIAL NETWORK

BY RICHARD VAN NOORDEN

126 | NATURE | VOL 512 | 14 AUGUST 2014

Nature | Vol 613 | 5 January 2023

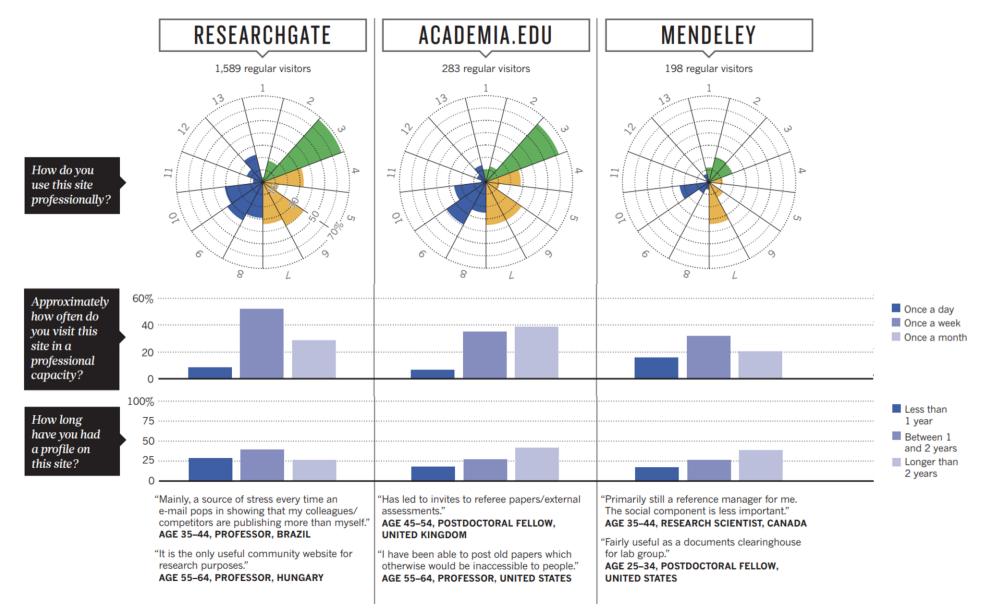
The microblogging platform has transformed how researchers communicate. What happens if it disappears? By Chris Stokel-Walker



Source-http://www.blogtips.org/the-evolution-of-social-communications







Each wedge in the circular charts corresponds to a question on the right. The answers are grouped by the intensity of user engagement they imply: low (green), medium (yellow) and high (blue).



- 1. Do not use professionally
- Curiosity only; not maintaining profile
- In case contacted



- Track metrics
- Discover jobs
- Discover peers
- Discover recommended papers

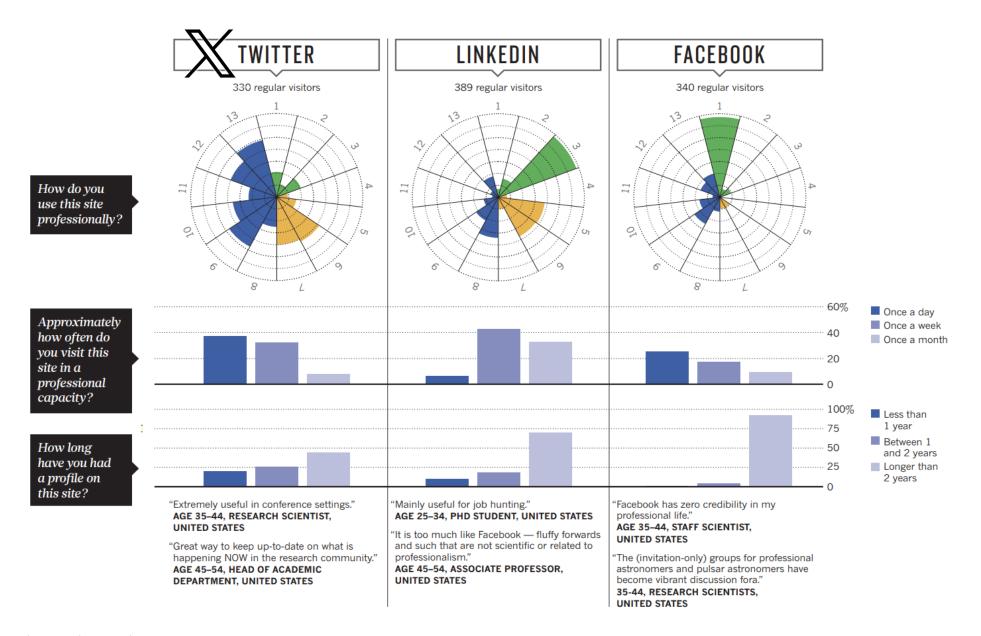


- 13. Follow discussions
- 12. Comment on research
- 11. Actively discuss research
- 10. Share links to authored content
- 9. Post (work) content
- Contact peers

126 | NATURE | VOL 512 | 14 AUGUST 2014







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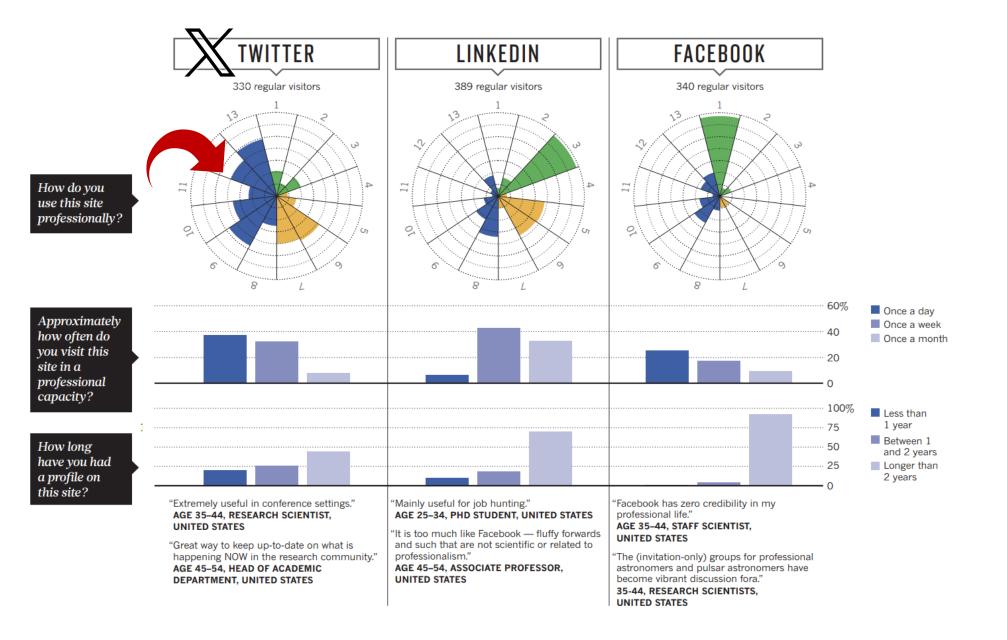


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126 | NATURE | VOL 512 | 14 AUGUST 2014







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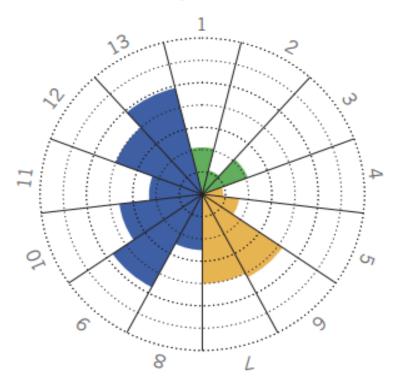




### Social media most used by researchers



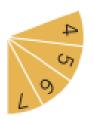
330 regular visitors



How do you use this site professionally?



- Follow discussions
- 12. Comment on research
- 11. Actively discuss research
- 10. Share links to authored content
- Post (work) content
- Contact peers



- Track metrics
- Discover jobs
- Discover peers
- Discover recommended papers









Jorge Cham @phdcomics · Aug 21

FIXED: Why academics REALLY use Twitter. @AcademicsSay @Richvn @nature nature.com/news/online-co... pic.twitter.com/SzRcbaUL0t



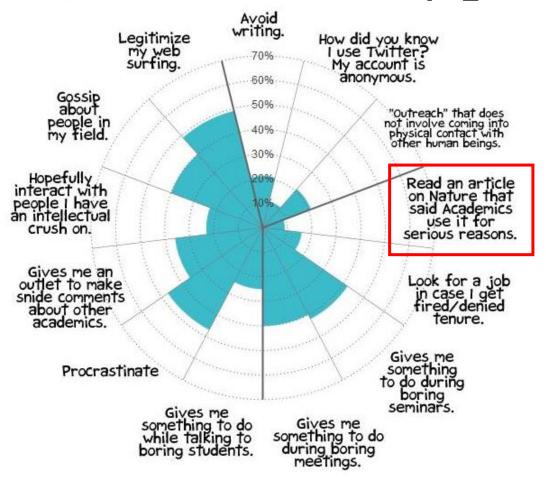
**1.6**K

**★** 731

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### Why Academics REALLY Use Twitter



www.phdcomics.com

Original graph from: nature.com/news/anline-collaboration-scientists-and-the-social-network-1.15711





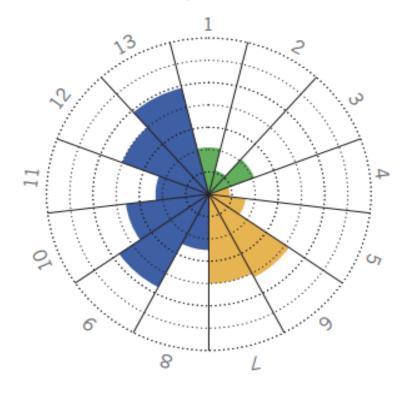




330 regular visitors

(https://t4scientists.com). "Twitter provides a fantastic way to actually get your work out there."

How do you use this site professionally?



### Twitter & Academia

- 1. Approximately 2,000 journal articles and 3,000 conference papers have been written about Twitter (Fry, 2014).
- 2. Nearly 90% of academics on Twitter use it for their work (Lupton, 2014).
- 3. Academic tweets are approximately 9 times more likely to be retweeted than other tweets (Holmberg and Thewall, 2014).
- 4. In 2012, only one in 40 scholars was active on Twitter (Priem et. al 2012).
- 5. There are no significant differences in how much time is spent on Twitter by amongst academics from different age groups (Holmberg and Thewall, 2014).
- 6. The largest proportion of academics on Twitter are early career academics (Lupton, 2014).

Gross (2014).



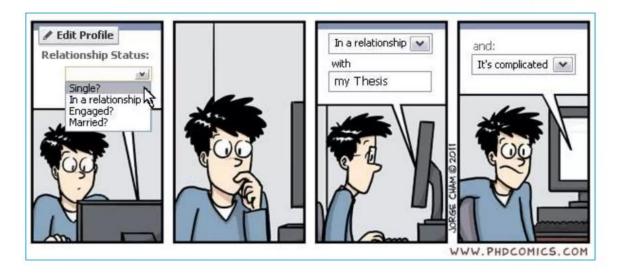


### Starting to use a social media (focus on )



- ✓ For whom are you writing?
- ✓ Why are you writing?
- ✓ How do you want to present yourself?
- ✓ What do you not want to show about yourself online? (e.g. restrictions on who can access your pages)

Haynes (2012)



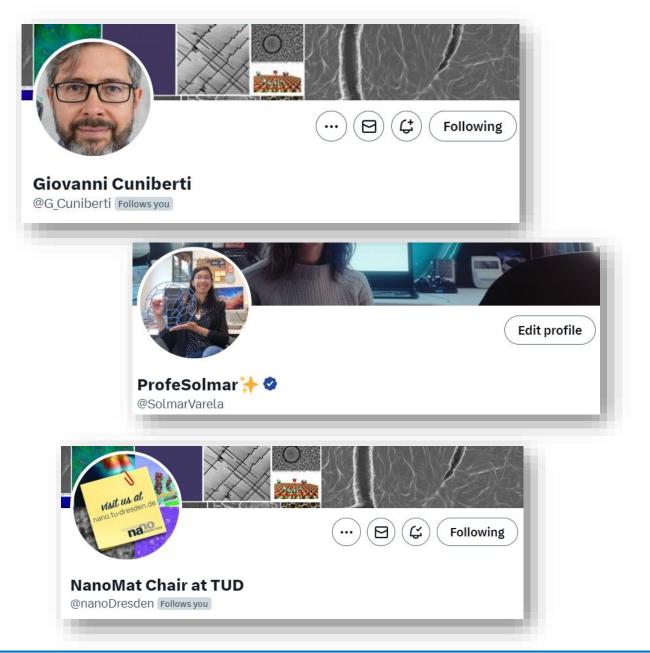








Hopefully, your academic name will be available but if not, you'll want To come up with something that will still make sense to your followers.



Courtesy of Venngage.





Create a bio that captures your business.



If you had just a few seconds, or in this case 160 characters, to explain your business to a complete stranger, what would you say? That will be your bio

Courtesy of **Venngage**.





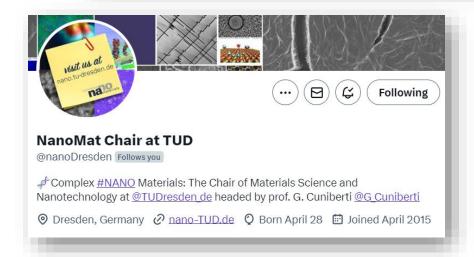
#### Giovanni Cuniberti

@G Cuniberti Follows you

Nanotechnology Professor at the TU Dresden. Courtesy appointments at POSTECH, the University of Alabama and SJTU. Also known w/ his given name Gianaurelio.

- ☐ Joined May 2014

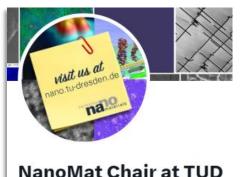






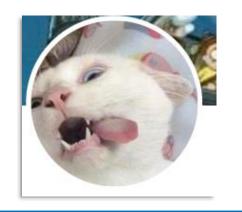
The perfect profile image will be one that your customers already associate with your work, like a logo. For personal accounts, you'll want to use a close-up headshot.





@nanoDresden Follows you







Courtesy of **Venngage**.





**Introduce yourself** by sending your first tweet.



**Tell your network** you're on Twitter.



### Make a good post

- Post or article?
- Be short and to the point: maximum 3 sentences
- Share a link to the website or a photo
- Do not use CAPS LOCK and avoid excessive use of punctuation marks
- Finish with a call-to-action
- Post mainly du ProfeSolmar



Hello, X (ex-twitter 8)

Hoy me toca seminario en mi instituto, @nanoDresden . Hablaré sobre ustedes, así que pórtense bien 🤣

Translated from Spanish by Google

Hello, X (ex-twitter 😝 )

Today I have a seminar at my institute, @nanoDresden . I will talk about you, so behave yourselves 💋



11:03 AM · Oct 26, 2023 · 105 Views

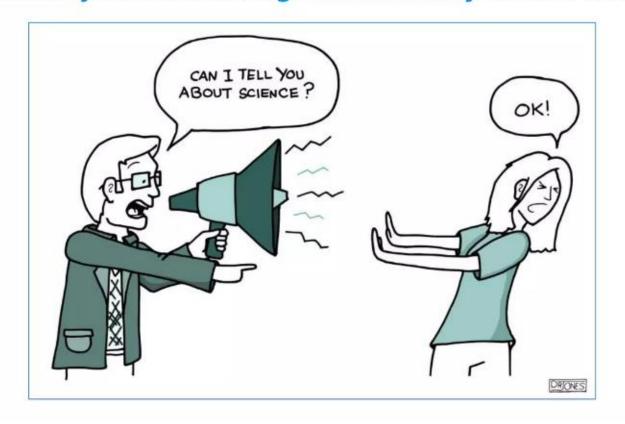
Courtesy of Venngage.





6

### How to share your knowledge succesfully with a wider public







Announce your published work along with a link to your article

Tag co-authors, your publisher, funder and institution, and anyone else you think might be interested in your paper.

Ensure your post describes the article or topic accurately

Teach them something useful in an enjoyable way.

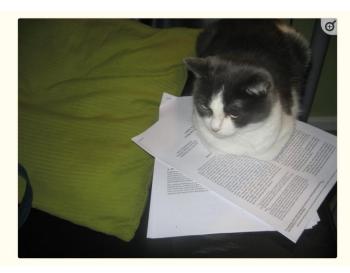






### Include hashtags

This will make your tweet part of a bigger conversation, meaning you might reach an even wider audience for your research. If you are attending a conference, use the conference hashtag to discuss ideas.



Picture that someone post on X to convey they are reading papers AND like cats.

Possible relevant hashtags: #Caturday #ECRchat #AcademicsWithCats







Consider including a relevant and engaging image, gif or video

This will help engage with your article. Make sure the image is copyright free before using or make sure you give credit to the artist.

### Engage in X conversations

Retweet what you find interesting. You can also direct-message people, thank people if they retweet you, ask questions, or set up polls.



Q 1

Ella Marushchenko @ @Ella\_Maru · <u>Sep 5</u>
New cover from our studio!! • \*\*

Importins transport histones H2A-H2B from the cytoplasm to the nucleus, where they wrap genomic DNA into a nucleosome. Importins bind H2A-H2B cargo and carry it through the nuclear pore in the nuclear membrane. Ran GTPase alters the interactions...

Show more







ılı 6,800

### Engage in Twitter conversations

Retweet what you find interesting. You can also direct-message people, thank people if they retweet you, ask questions, or set up polls.

#### A note on controversial topics

Be careful when tweeting about controversial topics such as genetically modified food or climate change. We understand that such topics may be a part of your research, and you can't avoid tweeting about them. However, try to be extra careful when selecting the language you use to try and avoid aggressive comments. Also, remember to be a responsible voice when engaging in important debates.

Now you should feel fully prepared to compose a thread of tweets about your next publication. We want to hear about your experience with Twitter. Do you have any useful tips on how to promote your research on Twitter? Please share those with us on tipbox@abcam.com, and we will include the best tips in our next article.



Be careful with fake news



Promote

Una pregunta para los científicos/académicos que usan esta red social ¿Consideran que X (ex-twitter) los ha ayudado a ganar visibilidad, generar colaboraciones, difundir y aumentar el impacto de su trabajo/investigación?

#### Translated from Spanish by Google

A question for scientists/academics who use this social network Do you consider that X (ex-twitter) has helped you gain visibility, generate collaborations, disseminate and increase the impact of your work/research?



No sé <u>•</u> 13%

307 votes · 2 hours left

2:06 PM · Oct 25, 2023 · 6,591 Views









13%

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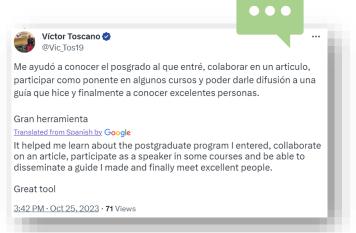
307 votes · 2 hours left

No sé 😐

2:06 PM · Oct 25, 2023 · 6,591 Views





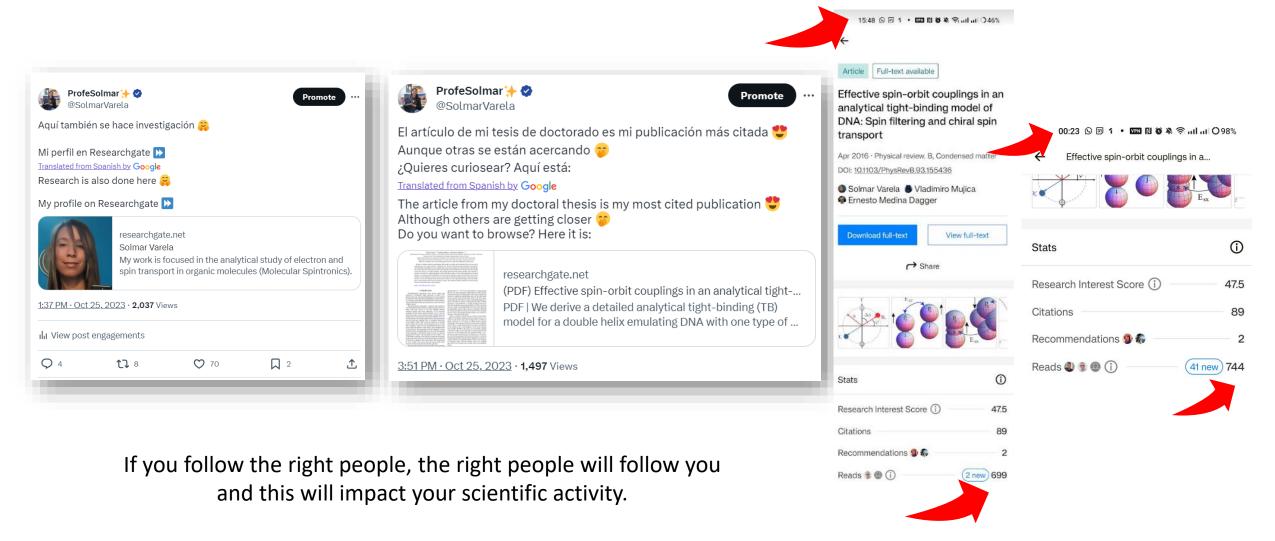








### Twitteando or X-ando? A very fast test...

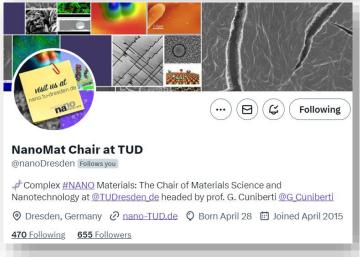


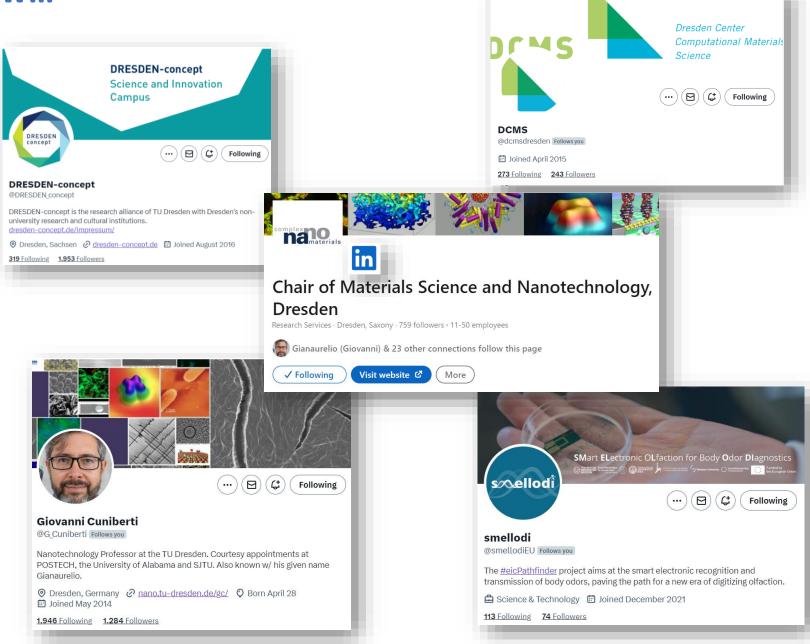




### Open an account and follow...



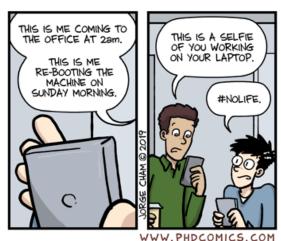


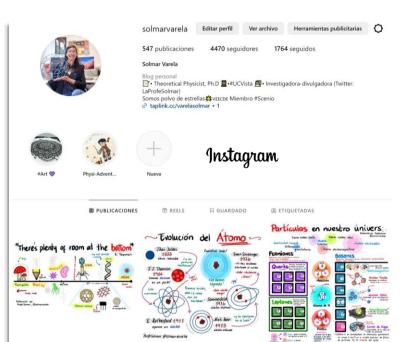


### Thank you

















Solmar Varela
Tu Dresden Germany, Chair of
Materials Science and
Nanotechnology, Post-Doc

### Google Scholar Solmar Alexandra Varela Salazar

Researcher at Institute of Materials Science and Nanotechnology, <u>TU Dresden</u>, Germany

Verified email at tu-dresden.de

Molecular spintronics transport phenomena condensed matter 2D materials



#### ResearchGate

Solmar Varela Ø Edit

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Venezuela | Website

99 Eleonore Trefftz Visiting Professor at Chair of Materials Science and Nanotechnology, TU Dresden

D

https://orcid.org/

0000-0002-9608-0601

Preview public record